

or less diagrammatic and that the *position*, rather than a correct delineation, of the various folds is sought to be indicated, with the view of introducing in a single figure as many of them as possible, since all are not present in any one species.

EXPLANATION OF PLATE XI. A.

Figs. 1-3. Diagrammatic sections of a shell of *Clausilia* with portions of the shell-walls removed, to show the positions of the various *lamellæ*. 1, front view; 2, back view; 3, seen from below.

Fig. 4. Front view, with outer wall and columella removed, to show the *pliceæ*.

a-l. These letters correspond with those prefixed to the terms given in the first column of the table.

<i>cl.</i> Clausilium.	<i>s.</i> Sinus.
<i>c.p.</i> Callus palatalis.	<i>sut.</i> Suture.

XXIX.—*Descriptions of new Species of Lepidoptera from Central America.* By HERBERT DRUCE, F.L.S., F.R.G.S., F.Z.S.

THE new species will be figured in the 'Biologia Centrali-Americana.'

Fam. Sphingidæ.

Subfam. SPHINGINÆ.

ORYBA, Walk.

Oryba imperialis.

Clanis imperialis, Druce, Biologia Centrali-Americana, Heterocera. vol. i. tab. iii. fig. 1 (1883).

Primaries and secondaries bright green: primaries crossed about the middle from the costal to the inner margin with a wide band of darker green, edged on each side with a greyish line, the base dark brown; a convex wide black line extends from the apex to the anal angle; a narrow brown line crosses the wing beyond the middle from the costal to the inner margin; each side of the line is irrorated with greyish scales; the fringe brown, excepting just at the anal angle, where it is yellow: secondaries crossed by two black bands, the outer band being the widest and thickly irrorated with greyish scales at the anal angle; the fringe bright yellow, excepting

along the outer margin nearest the apex, where it is reddish brown. The underside of both wings bright orange-red, clouded with brown along the outer margins, both wings crossed beyond the middle by two narrow brown lines: primaries with a dark brown line extending from the apex to the middle of the outer line, crossing the wing. The upperside of the head, thorax, and the abdomen dark green, the tegulae tipped with brown; the abdomen banded with black and with black and yellow spots at the sides and several patches of bluish-grey scales down the middle. The underside of the head, thorax, and abdomen bright orange-red; the antennae and legs dark brown. Expanse 5 inches.

Hab. Panama, Chiriqui (*Ribbe*, type *mus. Staudinger*); Peru (*mus. Druce*).

This very fine insect is allied to *Clanis achemenides*, Cram., specimens of which are before me from Colombia. Walker's *Oryba robusta* is without doubt conspecific with *C. achemenides* and should now be placed in the genus *Oryba*. A fine specimen of *Oryba imperialis* is in the Oxford Museum from an unknown locality.

Fam. Arctiidæ.

HALISIDOTA, Hübn.

Halisidota labaca, sp. n.

Primaries pale brownish yellow, with a small orange-coloured spot close to the base, three large spots along the costal margin, a large elongated patch on the outer margin, and two rather broad streaks on the inner margin partly crossing the wing towards the middle, all pale brown: secondaries pale yellowish white, partly hyaline near the base. The underside of the primaries as above, but with all the markings more indistinct. The head and thorax the same colour as the primaries; the abdomen above orange, the anus and the underside whitish; the legs and antennae orange-brown. Expanse $2\frac{1}{4}$ inches.

Hab. Mexico, State of Jalisco (*Richardson*).

A very distinct species, but nearest *H. cinctipes*, Grote.

EUHALISIDOTA, Grote.

Euhalisidota agelia, sp. n.

Primaries and secondaries uniformly greyish hyaline white; primaries crossed by three very faint yellowish-brown lines. The head, thorax, and abdomen yellowish white; antennae

pale yellowish brown; legs and underside of the head, thorax, and the abdomen yellowish white. Expanse $1\frac{1}{2}$ inch.

Hab. Mexico, State of Jalisco (*Richardson*).

SALLÆA, Felder.

Sallæa lacipea, sp. n.

Primaries white, with a broad >-shaped black mark at the anal angle, extending partly along the inner margin, but not nearly reaching the base of the wing, the upper part of the > reaching the end of the cell; the fringe black just below the apex: secondaries white, the inner half broadly black, but not reaching the base. The underside of both wings the same as above. The head and tegulæ white; the thorax and upperside of the abdomen deep black; the sides, anus, and the underside of the abdomen dark orange-yellow; the antennæ and legs black. Expanse 2 inches.

Hab. Guatemala, in the city (*Rodriguez*).

This species is allied to *S. ochrosterna*, Felder, from which it is at once distinguished by the entirely white costal margins of the primaries. We have received five males captured at the electric light in the city of Guatemala. The female is unknown.

Fam. Lithosiidæ.

EUDULE, Hübn.

Eudule bada, sp. n.

Primaries and secondaries hyaline orange-yellow; the primaries crossed from the costal to the inner margin by two indistinct, waved, blackish bands. The head, thorax, abdomen, and legs orange-yellow; the antennæ black. Expanse $\frac{3}{4}$ inch.

Hab. Mexico, Volcan de Ixtaccihuatl 11,500 feet (*Richardson*).

A small but very distinct species.

Fam. Saturniidæ.

ARSENURA, Duncan.

Arsenura Richardsoni, sp. n.

Primaries and secondaries brownish fawn-colour, shaded with dark brown along the inner margin and near the base of the primaries; both wings are thickly irrorated with small

black dots and a number of greyish scales near the base; a rather large lunular-shaped brown spot, edged with black, at the end of the cell; both wings crossed from the apex to the inner margin by a submarginal, rather wide, wavy, black line, which follows the outline of the wings; the black line is edged on the outer side by a narrow fawn-coloured line; the outer margin of the wings is pale reddish brown, the fringe being the same colour; a black elongated spot close to the apex, below which are three madder-brown markings; the bases of both wings are thickly clothed with fawn-coloured hairs. The underside pale fawn-colour; the outer half of the wings is greyish white, thickly irrorated with pale brown; both wings are crossed by two very indistinct brown lines, the outer margins and the fringe pale brown. The head, thorax, abdomen, and legs brownish fawn-colour; the antennæ yellowish brown. Expanse $5\frac{1}{2}$ inches.

Hab. Mexico, Bolaños, State of Jalisco (*Richardson*).

In form this insect resembles *Arsenura erythrinea*, Merian, and to some extent in coloration it is like *Saturnia pandora* of Klug. I have named this fine species after its captor Mr. Richardson.

Fam. Lasiocampidæ.

GASINA, Walk.

Gasina agdamea, sp. n.

♂. Primaries pale yellowish brown, shaded with dark brown at the end of the cell and near the base; the costal margin white, the veins beyond the cell white edged with dark brown, the inner margin near the base of the wing yellowish brown: secondaries pale cream-colour, darkest at the base and along the inner margin. The underside of both wings yellowish white, almost yellow at the base of the wings; the costal margin of the primaries edged with black nearly to the apex. The head, thorax, and abdomen yellowish brown, banded with white; antennæ pale cream-colour, tipped with white.

The female is almost the same as the male, but is considerably larger and has much less white on the primaries.

Expanse, ♂ $2\frac{1}{4}$, ♀ $2\frac{3}{4}$ inches.

Hab. Mexico, Coatepec (*J. Brooks*); Cuesta de Misantla (*M. Trujillo*); Guatemala, in the city (*Rodriguez*).

This fine insect is allied to *Gasina albicollis*, Walk., but it is entirely different in colour.

Gasina agesistrata, sp. n.

♀. Primaries and secondaries pale yellowish brown, without markings of any kind, excepting along the costal margin of the primaries, which are very faintly shaded with darker brown. The head, thorax, and abdomen yellowish brown, the underside of the abdomen and the legs dark brown, the antennæ yellowish. Expanse $2\frac{1}{2}$ inches.

Hab. Guatemala, in the city (*Rodriguez*); Honduras, Ruatan Island (*Gaumer*).

Two specimens of this insect, both females, very distinct from any known to me.

HYDRIAS, Herr.-Schäff.

Hydrius lacinia, sp. n.

Primaries semihyaline greyish white, with all the veins and the marginal line dark blackish brown; a broad white band, edged on both sides by two narrow, fine, brown lines, crossing the wing from the costal to the inner margin, and a submarginal waved white line extends from the apex to the anal angle: secondaries greyish, the costal and outer margin white, the hairs on the inner margin yellowish. The head, palpi, and front of the thorax yellowish brown; the thorax, base of the abdomen, and the anus blackish brown; the sides and underside of the abdomen, thorax, and legs yellowish brown; the antennæ greyish brown, darkest at the base. Expanse $1\frac{3}{4}$ inch.

Hab. Guatemala, in the city (*Rodriguez*).

A very distinct species, not nearly allied to any other known to me.

APATELODES, Packard.

Apatelodes lacetania, sp. n.

♂. Primaries blackish brown, crossed about the middle from the costal to the inner margin by a curved dark brown band; two black streaks close to the apex and several dark markings on the inner margin close to the base: secondaries greyish brown, the fringe of all the wings dark blackish brown. Underside dusky greyish brown; both wings with a submarginal white line. The head, thorax, and abdomen black, the tegulæ edged with greyish hairs; antennæ and legs black.

Female like the male, but larger and much paler in colour.

Expanse, ♂ $1\frac{1}{2}$, ♀ $1\frac{3}{4}$ inch.

Hab. Mexico, Omilteme, in Guerrero, 8000 feet (*H. H. Smith*).

A very distinct species. Mr. Smith captured both sexes in July 1888.

Fam. *Limacodidæ*.

PEROLA, Walk.

Perola lacipea, sp. n.

Primaries dark brown, with a reddish tinge near the base; a waved grey line crosses the wing from the apex to the inner margin and a short grey line extends from the costal to the middle of the outer margin: secondaries very dark brown, almost black. Underside of both wings uniformly blackish brown. The head, antennæ, and thorax reddish brown, the abdomen and legs dark brown. Expanse $\frac{3}{4}$ inch.

Hab. Mexico, Tierra Colorada, in Guerrero, 2000 feet (*H. H. Smith*).

One male captured by Mr. Smith in October 1888.

SEMYRA, Walk.

Semyra agemytha, sp. n.

♂. Primaries bright reddish brown, darkest at the base; a spot at the end of the cell, a waved streak on the inner margin close to the base, one near the anal angle, and one on the outer margin all metallic silvery: secondaries pale fawn-colour, palest at the base and along the inner margin; the fringe of both wings reddish fawn-colour. The head, thorax, and abdomen bright reddish brown, the anus yellowish; the antennæ and legs dark fawn-colour. Expanse 1 inch.

Hab. Mexico, Omilteme, in Guerrero, 8000 feet (*H. H. Smith*).

Mr. Smith captured one specimen of this pretty little insect in August 1888.

XXX.—*Descriptions of two new Central-American Buprestidæ.*
By CHARLES O. WATERHOUSE.

Thrincopyge marginata.

Viridi-cyanea, nitida; capite crebre sat fortiter punctato; thorace fortiter punctato, disco subtilius punctulato; clytris depressis, sat fortiter striato-punctatis, late rufo-marginatis, apice truncatis, minute denticulatis.

Long. 8 lin.